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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,050	07/17/2003	Rudiger Hunger	A35894-066340.0170	2272
21003	7590	03/09/2006	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			NGUYEN, JIMMY	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,050	Applicant(s) HUNGER ET AL.	
	Examiner Jimmy Nguyen	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims objection

Claims 1, 17, it is unclear where is the claim starts (such as which parts are the pre-amble and which are body of the claims). Clarification is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, 5, are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al (US 6,646,857).

As to claim 1, Anderson et al disclose (figs 2A, 2B) a wafer lifting device (228) having a lifting platform (246) arranged under a support member (not shown, but underneath of the wafer 206), wherein the top side of said wafer (206) support member includes a wafer bearing area, wherein said lifting platform (246) is arranged to move vertically toward and away from the underside of the wafer support member, and wherein at least three pins (228) are arranged to be moved through vertical through holes (226), which extend from the underside of the wafer support member (not shown, but underneath of the wafer 206) to the wafer bearing area, by said lifting platform, said

pins (228) being moveable between a first upper position wherein said pins project from the wafer bearing area by a selected amount and a second lower position wherein said pins are retracted into said through holes (see figure 2B), wherein a separate pin guide (234, 232) is provided for each pin (228), in which pin guide the pin is guided and held for longitudinal movement, and wherein the pin guides (234, 228) are fixedly connected to the wafer support member.

As to claim 2, Anderson et al disclose (figs 2A, 2B) the wafer lifting device (228) as claimed in claim 1, wherein the pin guide (228) has a guide hole (226) in which the pin is arranged in movable fashion, and the pin guide is arranged to hold the pin in said second lower position when the lifting platform (246) is lowered.

As claim 4, Anderson et al disclose (figs 2A, 2B) the wafer lifting device as claimed in claim 1 wherein the pin guide (228) is integrated in the wafer support member and the through hole (226) forms a guide hole for said pin.

As claim 5, Anderson et al disclose (figs 2A, 2B) the wafer lifting device as claimed in claim 1 wherein the pin guide (228) has a cylindrical body in which a guide hole (226) is formed, and wherein said cylindrical body is mounted to the wafer support member.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 6,646,857) in view of Matsunaga Daisuke (JP 05-129421).

As to claim 3, Anderson et al disclose everything except for the pin is mounted with spring loading in the direction of second lower position.

On the other hand, Matsunaga Daisuke teach the pin (3) is mounted with spring loading (4) in the direction of second lower position.

It would have been obvious to one having an ordinary skill in the art at the time of the invention was made to modify the teaching of Anderson with the spring loaded within the lifting pin of Matsunaga for the purpose of increasing the lifting or extracting force.

5. Claims 6 - 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 6,646,857) in view of Gujer et al (US 6,572,708)

As claim 6, Anderson et al disclose (figs 2A, 2B) everything except for the wafer lifting device as claimed in claim 5, wherein the cylindrical body (406) is received in a mounting hole (210) in the wafer support member, said mounting hole being coaxial with respect to the guide hole.

On the other hand, Gujer et al teach (fig 4) wherein the cylindrical body is received in a mounting hole in the wafer support member, said mounting hole being coaxial with respect to the guide hole.

It would have been obvious to one having an ordinary skill in the art at the time of the invention was made to modify the teaching of Anderson with the cylindrical body as taught by Gujer et al for the purpose of increasing flexibility of the pins.

As claim 7, Gujer et al teach (fig 4) the wafer lifting device as claimed in claim 6, wherein the cylindrical body (406) has a height corresponding to the thickness of the wafer support member and the mounting hole is a through hole having a diameter which is equal to or slightly greater than the diameter of the cylindrical body.

As claim 8, Gujer et al teach (fig 4) the wafer lifting device as claimed in claim 6 wherein the mounting hole has an internal thread and the cylindrical body has an external thread and is arranged to be engaged by a tool and wherein the cylindrical body is screwed into the mounting hole.

As claims 9 – 11, Gujer et al teach (fig 4) the wafer lifting device as claimed in claim 5 wherein the cylindrical body, is provided with a flange at a side perpendicular to an axis of the guide hole, wherein said flange has mounting holes for receiving screws for connection to the wafer support member.

Allowable Subject Matter

6. Claims 12 – 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record are fail to disclosed the combination of the based claims with the wafer lifting device ~~as claimed in claim 5~~ wherein an enlarged bore having an upper and a lower end and having a larger cross section than the guide hole is arranged in the cylindrical body, said enlarged bore being coaxial with respect to the guide hole, wherein the pin has an attachment, which is smaller than the cross section of the enlarged bore and can be moved longitudinally therein together with the pin, and wherein the lower end of the enlarged bore is formed by a cover attached to the flange plate, said cover having a pin hole, which has a smaller cross section than the enlarged bore and through which the pin penetrates.

av
3/3/06

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen whose telephone number is 571-272-1965. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ramtez Nestor, can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jimmy Nguyen

3/2/06


VINH NGUYEN
PRIMARY EXAMINER
A-4.2829
03/03/06